

supplementing the U-shaped supporting frame (1);

wherein if the lightweight door is installed in a motor vehicle body, the window gutter profiles (5, 6) are essentially aligned in longitudinal direction of the vehicle, with the ends of the window gutter profiles (5, 6) being permanently connected to the hinge support (2) and the lock support (3);

comprising a lateral impact protection element (7) arranged in the supporting frame (1), with the ends of said impact protection element (7) being permanently connected to the supporting frame (1), wherein the lateral impact protection element (7) is an extruded profile made from light metal or a light metal alloy;

comprising a window frame (8) made from light metal or a light metal alloy, wherein the ends of the window frame (8) are permanently connected to the inner window gutter profile (5);

wherein the supporting frame (1) is made in one piece as a pressed part or a deep-drawn part, from a metal sheet of minimum thickness.

Claim 7 has been amended as follows:

7. (amended) The lightweight door according to claim 1, wherein, in more heavily loaded areas, reinforcement and connection sheets (11) are arranged on the supporting frame (1) and permanently connected to said supporting frame (1) by a connection technique selected from the group consisting of press-riveting, bonding, and welding.

Claim 8 has been amended as follows:

8. (amended) The lightweight door according to claim 6, wherein, in the region of structural frame gussets, reinforcement and connection sheets (11) are arranged on the supporting frame (1) and permanently connected to said supporting frame (1) by a connection technique selected from the group consisting of press-riveting, bonding, and welding.

Claim 9 has been amended as follows:

9. (amended) A lightweight door for motor vehicles comprising an essentially U-shaped supporting frame (1) made from light metal or a light metal alloy,

5 wherein said supporting frame (1) comprises: a hinge support (2) forming one U-limb, a lock support (3) forming the other U-limb and a door bottom (4) forming the U-stay,

10 with an inner and an outer window gutter profile (5, 6) made from light metal or a light metal alloy, said window gutter profile (5, 6) supplementing the U-shaped supporting frame (1);

15 wherein if the lightweight door is installed in a motor vehicle body, the window gutter profiles (5, 6) are essentially aligned in longitudinal direction of the vehicle, and the ends of the window gutter profiles (5, 6) are permanently connected to the hinge support (2) and the lock support (3);

20 comprising a lateral impact protection element (7) arranged in the supporting frame (1), with the ends of said impact protection element (7) being permanently connected to the supporting frame (1), wherein the lateral impact protection element (7) is an extruded profile made from light metal or a light metal alloy;

comprising a window frame (8) made from light metal or a light metal alloy, wherein the ends of the window frame (8) are permanently connected to the inner 25 window gutter profile (5);

wherein the supporting frame (1) is made in one piece as a pressed part or a deep-drawn part, from a metal sheet of minimum thickness;

25 wherein the supporting frame (1) contributes to form part of the inside skin (11) of the door; wherein the supporting frame (1) forms an area-shaped cross stay (1") which closes the basic U-shape and which is located opposite the door bottom (4); wherein the connection regions of the various structural members, namely the supporting frame (1), inner window gutter profile (5), lateral impact protection element (7) and window frame (8), spatially coincide so as to form structural frame gussets;

30 wherein, in more heavily loaded areas, reinforcement and connection sheets (11) are arranged on the supporting frame (1) and permanently connected to said

supporting frame (1) by a connection technique selected from the group consisting of press-riveting, bonding, and welding.

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cont.*

Claim 10 has been amended as follows:

10. (amended) The lightweight door according to claim 7, wherein the reinforcement and connection sheets (11) are selected from the group consisting of pressed parts and deep-drawn parts.

Claim 11 has been amended as follows:

11 (amended) The lightweight door according to claim 7, wherein the reinforcement and connection sheets (11) in part form hollow chambers (12) with the supporting frame (1) at the hinge support (2).

*AS*

Claim 16 has been amended as follows:

16. (amended) The lightweight door according to claim 15, wherein the lateral impact protection element (7) on a front side door is arranged so as to slope downward from the hinge support (2) to the lock support (3), and the free L-limb of the upper hinge point strengthening plate (15) is L-shaped and directly welded together with the end of the lateral impact protection element (7).

*AS*

Claim 17 has been amended as follows:

17. (amended) The lightweight door according to claim 15, wherein on a rear side door the lateral impact protection element (7) is arranged so as to be upward sloping from the hinge support (2) to the lock support (3), and wherein the lower hinge point strengthening plate (15) is L-shaped, with its free L-limb being permanently connected to the lateral impact protection element (7).

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Claim 21 has been amended as follows:

21. (amended) The lightweight door according to claim 20, wherein the frame reinforcement part (11d) is selected from the group consisting of a pressed part and

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a deep-drawn part made from light metal or a light metal alloy, said frame reinforcement part (11d) being connected to the window frame (8) by way of welding.

Claim 23 has been amended as follows:

23. (amended) The lightweight door according to claim 19, wherein said window frame (8) has an upper angular section (20) integrated in the frame reinforcement part (11d).

*10*  
Claim 24 has been amended as follows:

24. (amended) The lightweight door according to claim 1, wherein a mirror triangle (22) is formed at one of the hinge support (2) and a cross stay (1") on the top above the inner window gutter profile (5).

Claim 25 has been amended as follows:

25. (amended) The lightweight door according to claim 24, wherein said mirror triangle (11c) is a reinforcement and connection sheet (11).

Claim 26 has been amended as follows:

26. (amended) The lightweight door according to claim 1, wherein the light metal is aluminum and the light metal alloy is an aluminum alloy.

Claim 27 has been amended as follows:

27. (amended) The lightweight door according to claim 1, wherein the permanent connection has been established by welding.

Claim 28 has been amended as follows:

28. (amended) The lightweight door according to claim 9, wherein the reinforcement and connection sheets (11) are selected from the group consisting of pressed parts and deep-drawn parts.

Claim 29 has been amended as follows:

29. (amended) The lightweight door according to claim 28, wherein the reinforcement and connections sheets (11) in part form hollow chambers (12) with the supporting frame (1) at the hinge support (2).

Add the following claims:

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30. The lightweight door according to claim 15, wherein the lateral impact protection element (7) on a front side door is arranged so as to be horizontal from the hinge support (2) to the lock support (3), and the free L-limb of the upper hinge point strengthening plate (15) is L-shaped and directly welded together with the end of the lateral impact protection element (7).

31. The lightweight door according to claim 15, wherein on a rear side door the lateral impact protection element (7) is arranged so as to be horizontal from the hinge support (2) to the lock support (3), and wherein the lower hinge point strengthening plate (15) is L-shaped, with its free L-limb being permanently connected to the lateral impact protection element (7).

Respectfully submitted,

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